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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,103	10/29/2003	Karl Paul Kroetsch	DP-310502	6609

22851 7590 10/14/2005
DELPHI TECHNOLOGIES, INC.
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EXAMINER

WALBERG, TERESA J

ART UNIT PAPER NUMBER

3753

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/696,103	Applicant(s) KROETSCH ET AL.	
	Examiner Teresa J. Walberg	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 10-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamich et al (2004/0069468) in view of Ozaki et al (6,357,519).

Lamich et al disclose a heat exchanger assembly and method of making including a core with fins and tubes (see Fig. 3) extending from opposite ends between opposite side thereof, first and second tanks at opposite ends of the core , a plurality of tank caps (48) closing the open ends of the tanks, a reinforcement member (50) integrally connected to each of the tank caps (48) by an integral connection portion (52), with the reinforcement members extending along the sides of the core and spaced from one another along the sides of the core, the core being devoid of reinforcement between the reinforcement members, reinforcing flanges (56) extending upwardly from the edges of the reinforcement members (50) and terminating short of the connection portion (52), the connection portion (52) being narrower (see Figs. 15a) than the tank cap (48), and including reverse bends (Fig. 15e) and notches (15a), and the reinforcement members (50) being in direct engagement with the fins of the core (26, see Fig. 3).

Lamich et al do not disclose the assembly being brazed together and the tank cap having a dished configuration with sidewalls completely surrounding the bottom and engaging the interior of the tank and the tank caps having separate and independent reinforcement members. Ozaki et al teach securing a heat exchanger together by brazing and using a tank cap having a dished configuration with sidewalls completely surrounding the bottom and engaging the interior of the tank and the tank caps having separate and independent reinforcement members. See Fig. 7.

It would have been obvious in view of Ozaki et al to securing the heat exchanger of Lamich et al together by brazing to more securely hold it together and to use a tank cap having a dished configuration with sidewalls completely surrounding the bottom and engaging the interior of the tank and the tank caps having separate and independent reinforcement members., the motivation being to more securely seal the tank.

3. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamich et al (2004/0069468) in view of Ozaki (6,357,519) et al as applied to claims 10-18 above and further in view of Pinto (6,478,080).

Lamich et al in view of Ozaki et al disclose a heat exchanger assembly as claimed with the exception of the flanges having openings which attach to anchors. Pinto teaches providing openings (34) in the flanges of heat exchangers for connection to support fasteners. It would have been obvious in

view of Pinto to provide support holes in the flanges of Lamich et al in view of Ozaki et al, the motivation being to enable securely supporting the assembly.

4. Applicant's arguments filed 6 September 2005 have been fully considered but they are not persuasive.

The applicants argue that Lamich et al do not disclose the tank caps being dish-shaped with sidewalls to completely surround a bottom so that the sidewalls engage the interior of the open end of the tanks. This is noted, however, Ozaki et al disclose the stated end cap structure. See Fig. 7.

The applicants argue that Figure 11 of Lamich shows an end cap that is not connected to a reinforcement member. This is noted. However, the office action referred to the embodiment of Fig. 3, which shows an integral end cap and reinforcement member, rather than to Fig. 11.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lamich et al (DE 101 32 153) is cited as showing a heat exchanger with end caps.

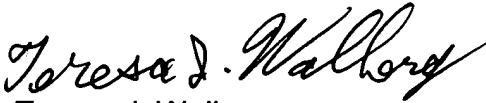
Kroetsch et al (2005/0109492) and Calhoun et al (2005/0150641) are cited as being the publications of related applications.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 571-272-4790. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on 571-272-4930. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Teresa J. Walberg
Primary Examiner
Art Unit 3753

tjw